

have not lost their seal, there is no way for sewer air to find its way into a house except under very extraordinary circumstances: and that the so-called "sewer gas" probably arises from filthy drains and water closets, dirt easily removable with soap, water, and diligence.

The choice of a heating system for moderate sized dwellings seems to lie with the hot water system. The cost of installation is greater for hot water than steam but the cost of maintenance is less.

The hot-air furnace of good make is also satisfactory, but there are two points to be insisted upon in its use: (1) that the opening for the fresh air flue should be at least six or eight feet above the ground level and should never be allowed in the cellar or basement; (2) that the furnace should be placed nearer the colder side of the house because hot air will carry but a very short distance against currents of cold air.

(To be continued)

---

## LUMBAR PUNCTURE

By HAZEL SOUTHARD

Graduate of Lakeside School for Nurses, Cleveland

A LUMBAR puncture is done for two principal reasons: as a diagnostic measure, and as a therapeutic measure to relieve pressure in the spinal canal caused by an excess of fluid such as is present in all forms of meningitis, hydrocephalus, hemorrhage into the spinal canal, etc. Where there is an excess of fluid, great relief is often afforded the patient.

As a diagnostic measure it is very valuable as, for instance, in the epidemic form of cerebrospinal meningitis the specific organisms may be found. The method, if properly done, is a safe one. The patient is placed on his side close to the edge of the bed, the shoulders are bent towards the knees and the knee drawn up toward the chest as far as possible. In this way the laminæ of the vertebræ are separated and allow a larger space for the entrance of the needle. Pillows, placed under the shoulders and thereby raising them, sometimes help. It is advisable to cocaineize the parts before the insertion of the needle and, if the patient is at all hard to manage, a general anæsthetic may be given.

Thoroughly scrub over the lumbar vertebrae and for quite a space around with green soap and sterile water, using sterile gauze. This is followed with ether, alcohol, and bichloride solution. Sterile towels are placed around, making a sterile field, and the operator, after scrubbing his hands, wears sterile gloves. The space between the fourth and fifth

lumbar vertebræ is the place generally chosen, as pus-cells, bacilli, etc., tend to gravitate toward the lowest portion of the dural sac where they might escape observation if the puncture is performed too high. With one finger on the spinous process of the fourth lumbar vertebra the needle is inserted just opposite about 2 cm. to one side of the median line and at an angle so that upon entrance of the canal it will be about in the middle. A small glass test-tube is held under the needle to catch the fluid. The needle must have a sharp point, because a dull point may push the membranes ahead, instead of going through them, and all efforts be fruitless. The pressure is determined by the rapidity with which the fluid appears; if drop by drop, then a low pressure. Too much fluid should not be withdrawn because of the dangers when there is too low a pressure. Clear fluid may not always be normal. A collodion dressing or sterile gauze with straps of adhesive may be applied after the withdrawal of the needle.

---

#### THE BOSTON NURSES' CLUB \*

By SUSAN BARD JOHNSON

THE Boston Nurses' Club is an organization of nurses associated together for business, professional and social purposes. In its membership are represented the various training schools of Boston and its vicinity, and others beyond the state limits. In organization we find strength—we can have and do many things that we could not do or have singly. Through association we gain a wider outlook and the ability to see more than one point of view.

The club idea was suggested in the winter of 1899 by Dr. Pierce of Milton to Mrs. Emily Neal Morse, a graduate of the Boston City Hospital. The nurses took up the suggestion and held several meetings. At the meeting held on April 17, 1899, the Boston Nurses' Club was organized with the very material help of Mrs. William Sedgewick and of Drs. Conant, Coggeshall, Vickery, Sumner, Worcester, Twichell, and Cheney, who had kindly consented to act as Advisory Board. Dr. William Conant was elected president of the club; and he is the one member of the original committee who has served us unremittingly for ten years. The club registry was formally opened on May 22, of the same year.

In January, 1900, the books and furniture which had belonged to the Graduate Nurses' Association were presented to the club, and in March of that year a reading room was established.

---

\* Read at the tenth anniversary of the Boston Nurses' Club, May 21, 1909.